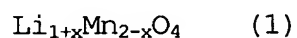


## WHAT IS CLAIMED IS:

1. A positive electrode active material for a secondary battery comprising a lithium manganate and a lithium nickelate,

wherein said lithium manganate is a compound having a spinel structure represented by the following formula (1) or said compound  
5 in which some of Mn or O sites are replaced with another element:

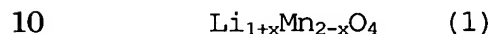


(in said formula (1) above,  $0.15 \leq x \leq 0.24$ ).

2. A positive electrode active material for a secondary battery comprising a lithium manganate and a lithium nickelate,

wherein said lithium manganate is a particle compound having a spinel structure represented by the following formula (1) or said  
5 compound in which some of Mn or O sites are replaced with another element; and

an Mn elution amount when immersing said particles in a mixture comprising an electrolyte salt and a carbonate solvent is 1000 ppm or less as determined by inductive coupling plasma emission analysis:

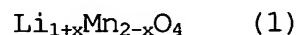


(in said formula (1) above,  $0.15 \leq x \leq 0.24$ ).

3. A positive electrode active material for a secondary battery comprising a lithium manganate and a lithium nickelate,

wherein said lithium manganate is a particle compound having a spinel structure represented by the following formula (1) or said  
5 compound in which some of Mn or O sites are replaced with another element; and

a specific surface area of said particles as determined by the BET method is  $0.3 \text{ m}^2/\text{g}$  to  $0.8 \text{ m}^2/\text{g}$  both inclusive:



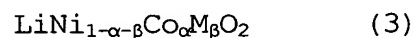
10 (in said formula (1) above,  $0.15 \leq x \leq 0.24$ ).

4. The positive electrode active material for a secondary battery according to any of Claims 1 to 3, wherein said lithium nickelate is a compound represented by the following formula (2) or said compound in which some of Co or O sites are replaced with another  
5 element:



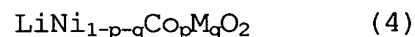
(in said formula (2) above,  $0.05 \leq y \leq 0.5$ ).

5. The positive electrode active material for a secondary battery according to Claim 4, wherein said lithium nickelate is a compound represented by the following formula (3):



5 (in said formula (3) above, M comprises at least one of Al and Mn;  $0.1 \leq \alpha \leq 0.47$ ;  $0.03 \leq \beta \leq 0.4$ ; and  $0.13 \leq \alpha + \beta \leq 0.5$ ).

6. The positive electrode active material for a secondary battery according to any of Claims 1 to 3, wherein said lithium nickelate is a compound represented by the following formula (4):



5 (in said formula (4) above, M comprises at least one of Al and Mn;  $0.1 \leq p \leq 0.5$ ;  $0.03 \leq q \leq 0.5$ ; and  $0.13 \leq p + q < 1$ ).

7. The positive electrode active material for a secondary

battery as claimed in any of Claims 1 to 6, wherein when a weight ratio of said lithium manganate to said lithium nickelate is  $a : (100-a)$ , "a" is in a range of  $20 \leq a \leq 80$ .

8. A positive electrode for a secondary battery comprising said positive electrode active material for a secondary battery as claimed in any of Claims 1 to 7 which is bound via a binder.

9. A secondary battery comprising at least a positive electrode and a negative electrode, comprising said positive electrode active material for a secondary battery as claimed in any of Claims 1 to 7.

10. The secondary battery as claimed in Claim 9, wherein said negative electrode comprises amorphous carbon as a negative electrode active material.

11. A process for manufacturing said positive electrode active material for a secondary battery as claimed in any of Claims 1 to 7, comprising the steps of:

5        mixing an Mn source and an Li source to prepare a first mixture, which is then subjected to a first calcination at a temperature of no less than 800 °C; and

      mixing a first-calcination product obtained by said first calcination with said Li source to prepare a second mixture with a  
10    higher rate of said Li source than said first mixture, and conducting a second calcination of said second mixture at a temperature of no less than 450 °C and lower than said first calcination to obtain said

lithium manganate,

wherein a  $D_{50}$  particle size of said Li source is 2  $\mu\text{m}$  or less.